

PROTECTION

be produced in a format that facilitates analysis of problems and long-term trends. The programs should be reviewed and revised regularly to improve the efficiency and selectivity of data gathering. The information management system should be flexible and appropriate to the types and quantities of data anticipated. Data management systems should be easy to access and use but should also be secure from unauthorized manipulation or changes.

Permanent inventory systems for potential contaminants or sources are helpful in preventing ground water and surface water contamination. One such system is the California Pesticide Registry (see Chapter 4), which establishes the quantity, location, and timing of the use of chemicals that could have an effect on water quality.

The committee recommends that states consider establishing ongoing inventories of potential contaminating activities and substances. The compounds and activities inventoried should be selected on the basis of potential risks and quantities of use in each state or regional area. They should include not only traditional sources such as industrial discharges, landfills, and underground storage of chemicals and petroleum products, insecticides, herbicides, fungicides, and fertilizers but also other polluting substances used in significant quantities in land use practices, such as transportation, septic tank cleaning, drilling or mining operations, and underground injection. Such a system can provide valuable information on quantities and locations of substances being used and their potential for contaminating ground water.

Classification

A comprehensive classification system such as that used in Connecticut can be an effective tool for optimizing ground water protection efforts. Maps prepared on the basis of a classification system can be used to guide activities such as the development of standards for water supply, land use management, source controls, and remedial action. By directing the location of potential sources of pollutants away from critical areas, classification can also reduce the cost and controversy associated with case-by-case siting of facilities. In addition, a mechanism for coordination between state and local governments is provided. Where mapping is not feasible, because of divided authority or data limitations, classification can still provide guidance, especially during permitting and enforcement procedures. However, its usefulness in this case is more reactive than helpful as a planning tool. This is true of the classification systems in Massachusetts and in New Jersey outside the Central Pine Barrens zone, where all fresh ground water is essentially considered to be one class (i.e., drinking water).